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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,012	11/02/2001	Benjamin N. Eldridge	20206-15	3257

7590 04/08/2004

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EXAMINER	
NGUYEN, VINH P	
ART UNIT	**PAPER NUMBER**
2829	

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/003,012	ELDRIDGE ET AL.	
	Examiner	Art Unit	
	VINH P NGUYEN	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *6-9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,10 and 12* is/are rejected.

7)☒ Claim(s) *4,11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *0803*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. It appears that the limitation of claim 23 is not read on elected species of figure 4 but it reads on non-elected species of figures 6-7, this claim is hereby withdrawn together with claims 6-9,13-22,24-26.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlin et al (Pat # 5,124,639).

As to claims 1,3 and 10, Carlin et al disclose in figure 5 a probe apparatus having a probe card (50) for testing a die (24) and a heating element (48) located adjacent to the probe card at a portion of the probe card (probe ring "40"). Carlin et al do not mention about the energy transmissive element to selectively control geometric planarity of the probe card. However, according to Carlin et al, the heating element (48) is used for heating the probe leads (22) of the probe card (50) in order to reduce probe lead shifting or drift. It appears that the probe lead shifting or drift would effect the planarity of the probe card (50).Therefore, it would have been obvious for one of ordinary skill in the art to recognize that the heating elements (48) would be qualified as the energy transmissive element since it utilizes transmitted energy to reduce probe lead shifting or drift and this action would be equivalent to selectively control geometric planarity of the probe card.

As to claim 2, it appears that the energy transmissive element (48) is located generally along a perimeter of the probe card. It is noted that along a perimeter of the probe card is not necessary directly on the edge of the probe card. Any locations near to the edge would be qualified as "generally along a perimeter".

4. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlin et al (Pat # 5,124,639) as applied to claims above and further in view of admitted prior art figure 3.

As to claims 5 and 12, Calrlin et al disclose a probe apparatus as recited in paragraph # above. The probe card of Carlin et al does not have a stiffener. However, admitted prior art figure 3 teaches that it would have been well known for one of ordinary skill in the art to provide a stiffener (160) for securing the probe card in place. It would have been obvious for one of ordinary skill in the art to provide a stiffener as taught by admitted prior art figure 3 to the probe card of Carlin et al so that the probe card is secured properly during test.

5. Claims 4 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not disclose a temperature sensor located near the energy transmissive element for monitoring temperature corresponding to deflection of the probe card.

6. Proposed drawing correction filed on 03/01/04 has been approved by Examiner.

7. Applicant's arguments filed on 03/01/04 have been fully considered but they are not persuasive.

Applicants argue that Carlin does not suggest or teach use of the heating element to selectively control the geometric planarity of the probe card as required by independent claim 1.

Examiner disagrees with Applicants about this issue. The heating element (48) would be qualified as the energy transmissive element since it utilizes transmitted energy to reduce probe lead shifting or drift and this action would be equivalent to selectively control geometric planarity of the probe card.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P NGUYEN whose telephone number is (521)272-1964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VINH P. NGUYEN
PRIMARY EXAMINER
ART UNIT 2829
04/02/04